<110> Harley, John

<120> Methods and Reagents for Diagnosis of Autoantibodies

<130> OMRF 114 CIP (2)

<140> 07/867,819
<141> 1992-04-13

<150> 07/472,947
<151> 1990-01-31

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Gly Thr Phe Lys Ala Phe Asp Lys
1   5

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Cys Asp Glu Phe Arg Lys Ile Lys Pro Lys Asn Ala Lys Gln Pro
1   5   10   15

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Arg Val Pro Leu Ala Gly Ala Ala
1   5

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Ala Gly Gly Pro Gly Val Gly Arg Ala Ala Gly Arg Gly Val Pro Ala
1   5   10   15

Gly

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Ala Gly Leu Ala Gly Pro Val Arg Gly Val Gly Gly Pro Ser Gln
1   5   10   15

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Gln Val Met Thr Pro Gln Gly Arg Gly Thr Val Ala
1   5   10

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Pro Thr Gln Tyr Pro Pro Gly Arg Gly Thr Pro Pro Pro Pro Val
1   5   10   15

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Thr Pro Pro Pro Pro Val Gly Arg Ala Thr Pro Pro Pro Gly Ile
1   5   10   15

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Pro Pro Pro Gly Ile Met Ala Pro
1   5

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Met Ala Pro Pro Pro Gly Met Arg Pro Pro Met
1   5   10

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Pro Ile Gly Leu Pro Pro Ala Arg Gly Thr Pro Ile Gly Met Pro Pro
1   5   10   15

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Pro Ile Gly Met Pro Pro Pro Gly
1   5

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Arg Pro Pro Pro Pro Gly Ile Arg Gly Pro Pro
1               5                   10


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       T, V and Y.


<400>  14

Arg Gly Pro Pro Pro Pro Gly Met Arg Pro Pro Arg
1               5                   10


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Thr Phe Lys Ala Phe Asp Lys His Met
1               5
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Glu Gly Pro Pro Pro Lys Asp Thr
1               5


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Lys Asp Thr Gly Ile Ala Arg Val
1               5


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Ile Pro Gln Ala Pro Ala Gly Leu Ala Gly
1               5                   10


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Gln Val Leu Asn Ile Gln Met Arg Arg Thr Leu His Lys Ala Phe Lys
1   5   10   15

Gly Ser

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Ile Cys His Gln Ile Glu Tyr Tyr Phe Gly Asp Phe Asn Leu Pro Arg
1   5   10   15

Asp Lys Phe Leu Lys
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Trp Val Pro Leu Glu Ile Met Ile Lys Phe Asn Arg
1   5   10

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Lys Thr Lys Ile Arg Arg Ser Pro Ser Lys Pro Leu
1   5   10

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<400> 23

Asn Arg Leu Asn Arg Leu Thr Thr Asp Phe Asn Val Ile Val Glu
1   5   10   15

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Gly Glu Ile Lys Trp Ile Asp Phe Val Arg Gly Ala Lys
1   5   10

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Ser Leu Asn Lys Trp Lys Ser Lys Gly Arg Arg Phe Lys Gly Lys Gly
1   5   10   15

Lys Gly Asn Lys
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Gly Asn Leu Gln Leu Arg Asn Lys Glu Val Thr Trp
1   5   10

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Ile Phe Val Val Phe Asp Ser Ile Glu
1   5

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<400> 28

Lys Glu Thr Asp Leu Leu Ile Leu Phe Lys Asp Asp Tyr Phe Ala
1   5   10   15

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Tyr Lys Asn Asp Val Lys Asn Arg Ser Val Tyr Ile Lys Gly Phe Pro
1   5   10   15

Thr

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Thr Asp Phe Asn Val Ile Val Glu Ala
1   5

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Glu Gly Ile Ile Leu Phe Lys Glu Lys Ala Lys
1   5   10

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Lys Val Gln Phe Gln Gly Lys Lys Thr Lys Phe Ala Ser Asp
1   5   10

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Arg Glu Asp Leu His Ile Leu Phe
1   5

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Cys Leu Leu Lys Phe Ser Gly Asp
1   5

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Thr Gly Pro Val Lys Arg Ala Arg
1   5

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Lys Val Glu Ala Lys Leu Arg Ala Lys Gln
1   5   10

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Met Asn Arg Leu His Arg Phe Leu
1   5

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Leu Cys Phe Gly Ser Glu Gly Gly Thr
1   5

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<400> 39

Ser Glu Gly Gly Thr Tyr Tyr Ile Lys Glu Gln
1   5   10

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Glu Ile Lys Ser Phe Ser Gln Glu Gly Arg Thr
1   5   10

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Ser Gln Glu Gly Arg Thr Thr Lys Gln
1   5

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Gly Arg Thr Thr Lys Gln Glu Pro Met
1   5

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Ile Ser Thr Lys Gln Ala Ala Phe Lys Ala Val Ser
1   5   10

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Ala Phe Lys Ala Val Ser Glu Val Cys
1   5

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Phe Thr Phe Ile Gln Phe Lys Lys Asp Leu Lys Glu Ser Met Lys
1   5   10   15

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Ser Met Lys Cys Gly Met Trp Gly Arg Ala
1   5   10

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Gly Met Trp Gly Arg Ala Leu Arg Lys Ala Ile Ala
1   5   10

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Ala Leu Ala Val Thr Lys Tyr Lys Gln Arg Asn Gly Trp Ser His Lys

Asp Leu Leu Arg Leu Ser His
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Leu Leu Arg Leu Ser His Leu Lys Pro Ser Ser
1   5   10

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His Glu Leu Tyr Lys Glu Lys Ala
1   5

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Leu Tyr Lys Glu Lys Ala Leu Ser Val
1   5

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Lys Ala Leu Ser Val Glu Thr Glu Lys Leu Leu Lys Tyr Leu
1   5   10

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Lys Leu Leu Lys Tyr Leu Glu Ala
1   5

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<400> 54

Leu Glu Ala Val Glu Lys Val Lys Arg Thr Lys Asp Glu
1   5   10

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His Leu Leu Thr Asn His Leu Lys Ser Lys Glu Val Trp Lys Ala Leu
1   5   10   15

Leu Gln Glu Met Pro Leu
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Ala Leu Leu Arg Asn Leu Gly Lys Met Thr Ala
1   5   10

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Leu Gly Lys Met Thr Ala Asn Ser
1   5

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<400>   58

Leu Cys Asn Glu Lys Leu Leu Lys Lys Ala Arg Ile His Pro Phe His
1               5                   10                  15


Ile



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<400>   59

Thr Tyr Lys Thr Gly His Gly Leu Arg Gly Lys Leu Lys Trp Arg Pro
1               5                   10                  15


Asp Glu



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Ala Leu Asp Ala Ala Phe Tyr Lys
1               5


<210>   61
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<400> 61

Ala Ala Phe Tyr Lys Thr Phe Lys Thr Val Glu Pro Thr Gly Lys Arg
1   5   10   15

Phe Leu Leu Ala
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Ala Ser Met Asn Gln Arg Val Leu Gly Ser
1   5   10

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<400> 63

Ala Met Cys Met Val Val Thr Arg
1   5

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Ala Phe Ser Asp Glu Met Val Pro
1   5

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Val Pro Cys Pro Val Thr Thr Asp
1   5

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<400> 66

Val Leu Met Ala Met Ser Gln Ile
1   5

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Thr Asp Cys Ser Leu Pro Met Ile
1   5

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<400> 68

Cys Ser Leu Pro Met Ile Trp Ala Gln Lys Thr Asn Thr Pro Ala
1   5   10   15

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<400> 69

Thr Phe Ala Gly Gly Val His Pro Ala Ile
1   5   10

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Ile Ala Leu Arg Glu Tyr Arg Lys Lys Met Asp Ile Pro Ala Lys Leu
1   5   10   15

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<400> 71

Ile Val Thr Lys Tyr Ile Thr Lys Gly Trp Lys Glu Val His Glu Leu
1   5   10   15

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<400> 72

Ala Leu Phe Ala Pro Arg Asp Pro
1   5

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Glu Arg Met Glu Arg Lys Arg Arg Glu Lys
1   5   10

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His Met Val Tyr Ser Lys Arg Ser Gly Lys Pro Arg Gly Tyr

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Tyr Lys His Ala Asp Gly Lys Lys Ile Asp Gly Arg Arg Val Leu
1   5   10   15

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<400> 76

Val Glu Arg Gly Arg Thr Val Lys
1   5

<210> 77
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<400> 77

Val Lys Gly Trp Arg Pro Arg Arg
1   5

<210> 78
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<400> 78

Arg Arg Ser Arg Ser Arg Asp Lys
1   5

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<400> 79

Arg Arg Arg Ser Arg Glu Arg Ser
1   5

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<400> 80

Ser Arg Glu Arg Ser Lys Asp Lys
1   5

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<400> 81

Lys Asp Lys Asp Arg Asp Arg Lys Arg Arg Ser Ser Arg Ser Arg
1   5   10   15

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<400> 82

Arg Arg Ser His Arg Ser Glu Arg
1   5

<210> 83
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<400> 83

Asn Leu Asn Glu Lys Ile Lys Lys Asp
1   5

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<400> 84

Ile Lys Lys Asp Glu Leu Lys Lys Ser Leu
1   5   10

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<400> 85

Leu Val Ser Arg Ser Leu Lys Met Arg Gly Gln Ala Phe
1   5   10

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<400> 86

Gln Gly Phe Pro Phe Tyr Asp Lys Pro Met Arg Ile
1   5   10

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<400> 87

Ile Ile Ala Lys Met Lys Gly Thr Phe
1   5

<210> 88
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<400> 88

Glu Arg Asp Arg Lys Arg Glu Lys Arg Lys Pro Lys Ser
1   5   10

<210> 89
<211> 9
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<220>
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<223> Binding site

<400> 89

Gln Glu Thr Pro Ala Thr Lys Lys Ala
1   5

<210> 90
<211> 8
<212> PRT
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<400> 90

Ala Leu Gln Gly Phe Lys Ile Thr
1   5

<210> 91
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<400> 91

Ala Met Lys Ile Ser Phe Ala Lys Lys
1   5

<210> 92
<211> 18
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<220>
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<400> 92

Ser Val Arg Lys Thr His Cys Ser Gly Arg Lys His Lys Glu Asn Val
1   5   10   15

Lys Asp

<210> 93
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<400> 93

Lys Asp Tyr Tyr Gln Lys Trp Met
1   5

<210> 94
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<400> 94

Ala Phe Gln Gln Gly Lys Ile Pro Pro
1   5

<210> 95
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<400> 95

Lys Ile Pro Pro Thr Pro Phe Ser
1   5

<210> 96
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<400> 96

Pro Pro Pro Pro Ser Leu Pro Gly
1   5

<210> 97
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<400> 97

Ser Leu Pro Gly Pro Pro Arg Pro
1   5

<210> 98
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<400> 98

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Gly Pro Pro Arg Pro Gly Met Met Pro Ala
1               5                   10


<210>   99
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<400>   99

Pro Pro Pro Pro Gly Met Met Pro
1               5


<210>   100
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<220>
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<400>   100

Gly Pro Ala Pro Gly Met Arg Pro Pro
1               5


<210>   101
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<220>
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<400>   101

Pro Pro Met Met Arg Pro Pro Ala
1               5


<210>   102
<211>   8
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<212> PRT
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<220>
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<400> 102

Pro Gly Met Thr Arg Pro Asp Arg
1   5

<210> 103
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<400> 103

Ile Gly Thr Phe Lys Ala Phe Asp
1   5

<210> 104
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<212> PRT
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<400> 104

Asp Cys Asp Glu Phe Arg Lys Ile
1   5

<210> 105
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<400> 105

Pro Lys Asn Ala Lys Gln Pro Glu
1   5

<210> 106
<211> 8
<212> PRT
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<400> 106

Met Pro Pro Pro Gly Met Arg Pro
1   5

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<210>  107
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<212>  PRT
<213>  homo sapien

<400>  107

Gln Gln Val Met Thr Pro Gln Gly
1               5


<210>  108
<211>  8
<212>  PRT
<213>  homo sapien

<400>  108

Gln Gly Arg Gly Thr Val Ala Ala
1               5


<210>  109
<211>  8
<212>  PRT
<213>  homo sapien

<400>  109

Ala Pro Thr Gln Tyr Pro Pro Gly
1               5


<210>  110
<211>  8
<212>  PRT
<213>  homo sapien

<400>  110

Gly Thr Pro Pro Pro Pro Val Gly
1               5


<210>  111
<211>  8
<212>  PRT
<213>  homo sapien

<400>  111

Ile Met Ala Pro Pro Pro Gly Met
1               5
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<210>  112
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<213>  homo sapien

<400>  112

Ile Gly Met Pro Pro Pro Gly Met
1               5


<210>  113
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<212>  PRT
<213>  homo sapien

<400>  113

Gly Met Pro Pro Pro Gly Met Arg
1               5


<210>  114
<211>  8
<212>  PRT
<213>  homo sapien

<400>  114

Pro Pro Gly Met Arg Pro Pro Pro
1               5


<210>  115
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<212>  PRT
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<400>  115

Met Arg Pro Pro Pro Pro Gly Ile
1               5


<210>  116
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<212>  PRT
<213>  homo sapien

<400>  116

Pro Ala Pro Gly Met Arg Pro Pro
1               5


<210>  117
<211>  8
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<212> PRT
<213> homo sapien

<400> 117

Pro Pro Pro Gly Met Ile Pro Pro
1   5

<210> 118
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<212> PRT
<213> homo sapien

<400> 118

Met Pro Pro Pro Gly Met Arg Pro
1   5

<210> 119
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<400> 119

Pro Pro Pro Gly Xaa Arg
1   5

<210> 120
<211> 5
<212> PRT
<213> homo sapien

<400> 120

Pro Pro Pro Pro Pro
1   5

<210> 121
<211> 8
<212> PRT
<213> homo sapien

<400> 121

Pro Gly Ile Arg Gly Pro Pro Pro
1   5

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<210>  122
<211>  8
<212>  PRT
<213>  Homo Sapien


<400>  122

Pro Pro Pro Gly Ile Arg Pro Pro
1                   5



<210>  123
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<212>  PRT
<213>  Homo sapiens


<400>  123

Thr Phe Lys Ala Phe Asp Lys His
1                   5



<210>  124
<211>  8
<212>  PRT
<213>  Homo sapiens


<400>  124

Cys Asp Glu Phe Arg Lys Ile Lys
1                   5



<210>  125
<211>  8
<212>  PRT
<213>  Homo sapiens


<400>  125

Asp Glu Phe Arg Lys Ile Lys Pro
1                   5



<210>  126
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<400>  126

Glu Phe Arg Lys Ile Lys Pro Lys
1                   5
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<210> 127
<211> 8
<212> PRT
<213> Homo sapiens

<400> 127

Phe Arg Lys Ile Lys Pro Lys Asn
1   5

<210> 128
<211> 8
<212> PRT
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<400> 128

Arg Lys Ile Lys Pro Lys Asn Ala
1   5

<210> 129
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<212> PRT
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<400> 129

Lys Ile Lys Pro Lys Asn Ala Lys
1   5

<210> 130
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<212> PRT
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<400> 130

Ile Lys Pro Lys Asn Ala Lys Gln
1   5

<210> 131
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<212> PRT
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<400> 131

Lys Pro Lys Asn Ala Lys Gln Pro
1   5

<210> 132
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<212> PRT
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<400> 132

Gln Val Met Thr Pro Gln Gly Arg
1   5

<210> 133
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<212> PRT
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<400> 133

Val Met Thr Pro Gln Gly Arg Gly
1   5

<210> 134
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<212> PRT
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<400> 134

Met Thr Pro Gln Gly Arg Gly Thr
1   5

<210> 135
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<400> 135

Thr Pro Gln Gly Arg Gly Thr Val
1   5

<210> 136
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<400> 136

Pro Gln Gly Arg Gly Thr Val Ala
1   5

<210> 137
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<400> 137

Pro Thr Gln Tyr Pro Pro Gly Arg
1   5

<210> 138
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<212> PRT
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<400> 138

Thr Gln Tyr Pro Pro Gly Arg Gly
1   5

<210> 139
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<212> PRT
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<400> 139

Tyr Pro Pro Gly Arg Gly Thr Pro
1   5

<210> 140
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<212> PRT
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<400> 140

Gln Tyr Pro Pro Gly Arg Gly Thr
1   5

<210> 141
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<212> PRT
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<400> 141

Pro Pro Gly Arg Gly Thr Pro Pro
1   5

<210> 142
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<400> 142

Pro Gly Arg Gly Thr Pro Pro Pro
1   5

<210> 143
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<400> 143

Gly Arg Gly Thr Pro Pro Pro Pro
1   5

<210> 144
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<400> 144

Arg Gly Thr Pro Pro Pro Pro Val
1   5

<210> 145
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<400> 145

Met Ala Pro Pro Pro Gly Met Arg
1   5

<210> 146
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<400> 146

Ala Pro Pro Pro Gly Met Arg Pro
1   5

<210> 147
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Pro Pro Pro Gly Met Arg Pro Pro

<210> 148
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<400> 148

Pro Pro Gly Met Arg Pro Pro Met
1   5

<210> 149
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<400> 149

Pro Pro Pro Gly Met Arg Pro Pro
1   5

<210> 150
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<400> 150

Arg Pro Pro Pro Pro Gly Ile Arg
1   5

<210> 151
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<400> 151

Pro Pro Pro Pro Gly Ile Arg Gly
1   5

<210> 152
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<400> 152

Pro Pro Pro Gly Ile Arg Gly Pro
1   5

<210> 153
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<400> 153

Pro Pro Gly Ile Arg Gly Pro Pro
1   5

<210> 154
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<400> 154

Arg Gly Pro Pro Pro Pro Gly Met
1   5

<210> 155
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<400> 155

Gly Pro Pro Pro Pro Gly Met Arg
1   5

<210> 156
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<400> 156

Pro Pro Pro Pro Gly Met Arg Pro
1   5

<210> 157
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Pro Pro Pro Gly Met Arg Pro Pro
1   5

<210> 158

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<400> 158

Pro Pro Gly Met Arg Pro Pro Arg
1   5

<210> 159
<211> 7
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<213> Homo sapiens

<400> 159

Pro Pro Pro Gly Met Arg Pro
1   5

<210> 160
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<400> 160

Pro Pro Pro Gly Met Arg
1   5

<210> 161
<211> 5
<212> PRT
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<400> 161

Pro Pro Pro Gly Met
1   5